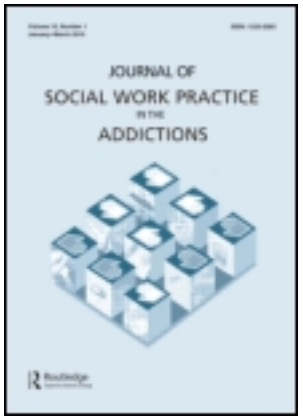

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Mechanisms of Adherence in a Harm Reduction Housing Program

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Advances in clinical therapies for people living with HIV have greatly increased life expectancies, but the high levels of adherence that are necessary for clinical success are infrequently achieved, especially for chronically homeless substance users. The Open Door is a harm reduction housing program that seeks to improve clinical outcomes for this population. We present findings from qualitative interviews with residents of the program, conducted to explore facilitators of residents' success in the program, which is ultimately defined as HIV clinical adherence. Two major themes developed. Positive changes *captures processes or characteristics that residents reported as having changed as a result of living in the program.* Mechanisms of success *reflects aspects of the program to which residents attributed their improved adherence. Given that improving adherence in vulnerable populations has both clinical and public health implications, our study suggests future avenues for research and foundations on which to build future interventions.*

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In the past 20 years, highly active antiretroviral therapy (HAART) has dramatically improved clinical outcomes for people living with HIV and AIDS. However, 70% to 80% adherence is required for individuals to achieve viral suppression, which is an indicator of very low amounts of virus in the body (≤200 copies). Rates of both adherence and viral suppression are low in the United States. A recent meta-analysis of North American adherence studies demonstrated that only 55% of people living with HIV achieve optimal adherence, and just 19% have achieved viral suppression (Gardner, McLees, Steiner, Del Rio, & Burman, 2011).

Studies have consistently shown that adherence rates are even worse among marginalized populations. Adherence rates have been shown to range from just 13% to 32% among people living with HIV who are homeless or who have cooccurring disorders of serious mental illness and substance use (Bamberger et al., 2000; Baum et al., 2009; Chander, Lau, & Moore, 2006; M. Friedman et al., 2009; S. R. Friedman, Cooper, & Osborne, 2009; Knowlton et al., 2006). By association, viral suppression is much lower in these vulnerable populations (Muthulingam, Chin, Hsu, Scheer, & Schwarcz, 2013; Sullivan et al., 2007). Because viral suppression indicates not only an improved clinical prognosis but also that an individual is less likely to transmit the virus to others, the fact that so few people in our country have achieved undetectable viral loads has both treatment and public health implications.

It is apparent that we must find ways to help people living with HIV/AIDS improve their abilities to adhere to their treatment regimens. This is especially true for those in vulnerable populations who have historically demonstrated poor adherence rates. Harm reduction is a philosophy of service that encourages positive change regardless of continued risk behaviors. Harm reduction has been shown to facilitate adherence to HAART in marginalized populations, including those who face challenges related to addiction, mental health diagnoses, and homelessness (Bamberger et al., 2000). The primary goal of harm reduction is to help the client reduce the harms that are associated with their risk-related behaviors. This might or might not include abstinence. Other basic tenets of harm reduction include the concepts of starting where the client is, and accepting the client as the authority on which changes and treatment goals are appropriate and feasible (Marlatt, Larimer, & Witkiewitz, 2011). Research has shown that harm reduction interventions can be useful in engaging substance users in treatment and reducing the negative consequences of their substance use across many settings, including housing (Mancini, Linhorst, Broderick, & Bayliff, 2008; Marlatt & Witkiewitz, 2002; Stevens, Radcliffe, Sanders, & Hunt, 2008).

Housing interventions based on the principles of harm reduction might provide a critical service to help vulnerable and unstably housed individuals

connect with treatment. A second approach that is highly consistent with harm reduction philosophies is Housing First, a consumer-driven approach that prioritizes housing over other treatment goals (Padgett, Stanhope, Henwood, & Stefancic, 2011). Housing First is committed to client choice as well as immediate and ongoing housing availability, and does not make the provision of housing conditional on treatment goals, engagement in mental health treatment, or abstinence from substance use.

Research has shown that housing support based on harm reduction and Housing First is desired by members of the target population. Specifically, it has been demonstrated that residents of a Housing First harm reduction program consider an abstinence-based approach to treatment to be neither desirable nor effective in helping them attain or maintain housing stability (Collins et al., 2012). Moreover, a review of the effects of housing on health outcomes for people living with HIV found a significant positive relationship between stable housing and improved health outcomes, including medication adherence and engaging in the health care system (Leaver, Bargh, Dunn, & Hwang, 2007). However, it is important to note that neither of these previous studies utilized the laboratory test of viral load as their clinical outcome measure but, rather, depended on client self-report, despite the fact that viral load is the most reliable indicator of medication adherence.

Harm reduction and Housing First have been a central focus of a number of recent qualitative studies examining clients' perception of positive and negative influences on their engagement in care, although few studies specifically focus on HIV clinical adherence as it relates to persons living with HIV, serious mental illness, and substance use. One study of a harm reduction housing program found that this approach helped residents to feel that the goals of the housing program were in alignment with their own personal goals (Collins et al., 2012). Another found that individuals entering a Housing First program were interested in addressing both chronic health and mental health problems, but much less interested in reducing substance use or taking psychiatric medications (Weinstein, Henwood, Matejkowski, & Santana, 2011).

THE OPEN DOOR PROGRAM

The Open Door is a Housing First program that uses a harm reduction approach to improve clinical outcomes for people who are chronically homeless, typically active drug users, and living with HIV/AIDS. We recently published results from a quantitative evaluation study of this program in which 69% of study participants achieved viral suppression, even though they were all members of the vulnerable population of chronically homeless active drug users with serious mental illness (Hawk & Davis, 2012). Given that this rate of viral suppression far exceeds studies in similar populations,

we subsequently conducted in-depth qualitative interviews with past and present residents of The Open Door to increase our understanding of facilitators of success for this highly marginalized population. Because the goal of the housing program is to improve clinical outcomes for residents, program success is ultimately defined as clinical adherence. As indicated earlier, viral suppression is the biological measure used to assess clinical adherence, yet it has not been used as a measure of adherence in previous studies. Specifically, we set out to answer this question: What aspects of a harm reduction, Housing First program do consumers view as being important to their clinical adherence?

Since 2006, The Open Door has housed 43 chronically homeless HIV-positive individuals, the majority of whom have had cooccurring issues including active substance abuse and untreated serious mental illness. Residents of The Open Door have their own apartments and pay low rental fees, which are typically afforded through public entitlements such as Supplemental Security Income. Supportive assistance is provided to residents by peer resident managers, who are themselves living with HIV/AIDS, in recovery from addiction, or both. The Open Door operationalizes harm reduction by (a) informing residents that sobriety from drugs and alcohol is not required for inclusion in the program; (b) giving residents information about how drug use creates additional health risks and supporting them in independent decision making about how to achieve optimal, yet feasible, health outcomes; (c) actively helping residents achieve their health-related goals regardless of whether or not reducing substance use is a goal; and (d) prioritizing program admission for individuals who are least likely to be served in traditional housing models or for whom these models have not been successful. Prioritized individuals include those who are active drug users, have criminal histories, have mental health diagnoses, and are in need of treatment for HIV, but are not on HIV medication.

METHOD

Using grounded theory as a basis for our approach, our purpose was to describe and build evidence for the implementation of mechanisms that could be used by other providers to improve clinical outcomes in similar unstably housed populations. The study was approved by the University of Pittsburgh Institutional Review Board.

Nineteen current and former residents of the program were interviewed for this study. Of these 19 residents, 15 (79%) had undetectable viral loads at the time of the study, and all of them had demonstrated significant clinical improvements since moving into the building. Eleven participants were living at the program during the time of the study and eight were interviewed after they had left the program.

TABLE 1 Study Participant Demographics

Category	*n*	%
Gender		
Male	15	79
Female	4	21
Transgender: Male to female	0	
Transgender: Female to male	0	
Age		
Age range	39–59	
Mean age	49.5	
Median age	49.0	
Race		
African American	15	79
White	4	21
Criminal history		
Yes	17	89
No	2	11
Serious mental health diagnosis		
Yes	19	100
No	0	
Drug use	Former	Current
Heroin	4 (21%)	1 (5%)
Crack	17 (89%)	17 (89%)
Alcohol abuse	5 (26%)	3 (16%)
Resident status		
Current	11 (58%)	
Past: Left for independent housing	4 (21%)	
Past: Left in negative context	4 (21%)	
Viral load status		
Undetectable (<200 copies/mL)	15 (79%)	
Detectable (>200 copies/mL)	4 (21%)	

Table 1 provides demographic information for study participants. Of the 19 participants, 15 were males, 15 were African American, and 4 were White, with an average age of 49.5. Participants were recruited directly from the housing program if they were currently living there or via other providers if they were past residents. Specifically, social workers and the peer navigator at a local HIV clinical care provider used by residents of The Open Door were contacted for assistance in recruiting participants. They notified current and past residents of our interest in interviewing them and provided contact information for participation. Because this clinic also offers supportive services to patients of other medical providers, it was possible to invite all of the former residents to participate in interviews, even if the clinic was not currently their primary treatment site. A total of 19 individuals were invited to participate in interviews and all of them agreed. Recruitment concluded once saturation was achieved. Purposive sampling included former residents who had left the housing program under negative circumstances, and four out of five of these individuals participated in our study. The inclusion of these former residents provided the opportunity to collect "worst case scenario"

feedback. Another advantage of interviewing former residents was that it reduced the likelihood that individuals would feel pressure to give positive responses because they were no longer receiving services from the program. We were thus able to access a relatively diverse sample of participants in a cohort of people who shared many similar characteristics related to mental illness, addiction, HIV, and homelessness.

Each participant completed a one-time interview that ranged in length from 45 to 90 min and received $10 in cash to honor their time. Interviews were conducted by three individuals who had extensive experience working with this marginalized population and who had demonstrated skills in conducting in-depth, semistructured interviews. We intentionally selected interviewers who were known to the research participants to establish rapid rapport and trust building. One interviewer, who conducted 11 of the 19 interviews, was directly involved in the creation of the program and was known to both the residents and the staff. The other eight interviews were conducted by two master's-level professionals who had interned at the facility. Using interviewers with an established connection to the program was intended to limit social desirability bias. It is our belief that study participants were less likely to feel the need to impress the interviewers given that their behavioral histories, including active drug use and significant criminal involvement, were already known to the staff.

The majority of the interviews were conducted on site at the program. Former residents were interviewed in a local physician's office that was known and familiar to the participants. Interviews were recorded with participant consent. The interviewers told participants that their individual comments would be kept confidential, but that overall study results would be shared with the staff for quality improvement. They were not required to sign any agreement to participate; however, interviewers did read each participant a script that explained that these interviews were for the purpose of evaluation research.

The interview protocol was developed on a conceptual framework that was based on the fact that because these residents had demonstrated high rates of clinical success only since moving into the program, exploring elements of the program that they perceived to be most useful would in turn be helpful in understanding aspects of the program that could be underscored and replicated elsewhere. A grounded theory approach was used to assess what parts of this supportive housing program had helped residents to achieve clinical success, characterized by viral suppression (Glaser & Strauss, 2009). The interview questions were nondirective to avoid leading or biasing the answers in a particular direction.

The first two questions were "warm-up questions" about who were important people in their lives, which also provided some history of residents' lives prior to involvement with the housing program. The other eight questions were related to residents' experiences in the program, as well as

TABLE 2 Interview Protocol

1. Who was the most important person in your life when you were a child?
2. Who is the most important person in your life now?
3. Using just a few words, tell me how would you describe yourself before you came to The Open Door.
4. How would you describe yourself now?
5. What do you think you will be like in 3 years?
6. What do you think are the best things about The Open Door?
7. What do you think are the worst things about The Open Door?
8. What would you say The Open Door has helped you to do?
9. What things have changed in your life since being at The Open Door?
10. What about The Open Door matters the most to you?

explorations of what aspects of the program were most important to them, what changed for them since being at the program, and how they perceived themselves in the past, present, and future. The full interview protocol is contained in Table 2. Care was taken to administer the protocol with flexibility and empathy to encourage a natural flow of discussion and to increase participant comfort. The audio-recorded interviews were later transcribed verbatim by the interviewers. Interviewers also added field notes to the transcripts to help the coders interpret the transcripts, such as references to participants' nonverbal communication.

All interviews were coded manually using Microsoft Word; no qualitative research software was used. Several coding and analysis strategies were used to improve study rigor. First, four different coders reviewed the first two transcripts from each of the three interviewers and then reviewed the codes together to check for intercoder reliability. Although there was a high degree of agreement among the coders, in cases where there was divergence the codes were discussed until there was category agreement. The interviews were then recoded for consistency. Using the fully developed codes, the two primary coders then coded all 19 interviews separately, and then reviewed once again for intercoder reliability. Slight adjustments were again made to ensure consistent use of codes. Finally, each member of the research team reviewed the coded interviews repeatedly until such time that we were confident about the emerging themes. This process was strengthened by the use of memos to track conceptual development. As a final step, the data were triangulated by reviewing the interpretation of the results with the interviewers and with program staff to ensure that the general themes were consistent with their experience of the residents interviewed.

RESULTS

The two major themes that developed from the analysis of the interviews were *positive changes* and *mechanisms of success.* Positive changes captured

significant personal changes that the residents attributed to the program. Subthemes included changes in drug use patterns, increased independence, and positive feelings. Mechanisms of success included program elements identified by residents as helping them increase their stability and improve adherence to medications. These included the subthemes of increased sense of community, supportive assistance, and the representative payee program.

Positive Changes

Changes in drug use patterns

Study participants often referred to previous drug use in contrast to current drug use, making comments that referenced "when I used to use drugs. . . ." However, when these phrases were probed by the interviewers, it became clear that all of the participants were still using illicit drugs. Nonetheless, there was a clear cognitive shift in how study participants thought about their drug use after moving into the building. Participants discussed having control over addiction even though they fully intended to keep using. Participants also reported they were using drugs less frequently, even though program staff are explicit about the fact that neither reduced drug use nor sobriety are expected.

The following statements exemplified these views:

> Before I was being used; the drugs controlled me. Here I control what happens.

> I was a thief, a dope fiend, a crack head, I was everything. Now I don't . . . I don't . . . I was an alcoholic everything. I mean, I ain't saying I stopped completely but once or twice a month you know and I don't hustle to get high, ya know, and that's all I did before, ya know.

> I'll do $30 a month. That's okay. I'm not going to beat myself up about it. I don't want to stop altogether.

> It helped me to realize in life that it ain't just about just getting high. I mean, I just use to live day to day, you know, drinking and everything and now, I mean, I go read a book now, you know. I never did that.

> Oh, I have a lot better grasp of a sense of reality. Do you care if I talk about drugs? . . . Because I . . . before I came here I was using drugs. I still use drugs now, but now I have a sense of um . . . a sense of . . . a more independent sense . . . like I do live on my own. I do get my own groceries, I do my own laundry, I don't know . . . . I still do drugs so my life is not perfect by any means but the business end of my life is more manageable and less stressful so . . . that would be my answer.

Participants spoke clearly about the harm reduction approach and indicated that it was meaningful to them:

> At The Open Door they were telling me about harmful reduction, [sic] all I kept hearing was harmful reduction; wean yourself down because to me there is no just "I'm going to stop getting high." You're not just going to stop smoking cigarettes. You're not just going to stop, you may start by smoking three, then two, then one, and then none.

It is significant that even though these residents reported continued drug use, they still demonstrated high rates of viral suppression as demonstrated in Table 1. These data underscore the point that these active drug users were able to achieve high rates of clinical adherence.

Increased independence

The increased levels of independence reported by study participants included financial independence, having a sense of control over their own actions, and having their own place and space. Although the interviewers did not ask specifically about changes in independence, it came up frequently in response to the questions, "What would you say [the program] has helped you to do?" and "What things have changed in your life since being at [the program]?" There were many discussions about the fact that the housing program helped residents to build credit and become financially independent:

> The best things, um, well . . . for one getting my financial life in order is the very best thing for me because my name is on utilities, I believe at least the gas bill, I know I have no problem moving out of here and getting gas service to a house or electrical service to a house because all my bills are caught up.

Participants expressed gladness about having control over simple acts of daily living:

> I cook my own meals, take my shower or a hot bath, whenever I want.

> Just that I can come here. I can come and be on my bed or on my couch or on my floor naked or with clothes, I have a place to go and take my own shower.

Having one's own place was identified as being important, not only in terms of privacy and control over one's own actions, but also in terms of a sense of stability and peace.

> Open Door is, again, just some peace of mind where I can relax. I can be me here.

> Matters the most to me? Oh, I can't answer that, it matters so much to me. It like, changed my life for real, for real. It did. It just really helped me change my life. Yeah. Yeah. It made me look at life a lot different than when I wasn't living here. [Just by] getting my own apartment and getting back control of my own life.

> What matters the most to me . . . [long pause] . . . being almost 60 years old . . . The Open Door . . . what matters most . . . once again is having a roof over my head, ya know what I'm saying, and I'm not out in the street. Things look a little better, ya understand, than it did 4 or 5 years ago. That's all I can say about it . . . what matters the most . . . is the stability part . . . having a roof over my head, ya know what I'm saying. Knowing that I have light and gas and heat, clothes, food, and that's all I can say.

Positive feelings

Participants also noted many positive feelings that they experienced after moving into the housing program. Many interviews captured references to feelings of improved self-worth, of having a new sense of self, or of having life goals.

> Me. I changed. I changed. It wasn't about nobody changing me, it was about me changing.

> Helped me to realize that I am worth [sic]. That I do have something to live for. That I am a good person. And um . . . it's not too late for me to stand up and be a productive adult.

> Um, I have more meaning. Then everything I do has to be that uh, I have benefits. One of the most important things I learned once I left [the program] was to have goals, short and long term. So they really helped me a lot to uh, identify myself.

Other references to positive feelings took the form of feeling glad that their basic needs were met, or just a general relief of being in a safe place.

> I'm not drugging that much now, hardly ever, I still go down to my old stompin' grounds, but not like I was every day. It was just some place to go. Here is like a safe haven.

> The glitches I run into here—that's my shit. It's not even enough for me to be worried about. I'm just so happy that my life is finally going in a direction that I feel good about.

> Uh . . . well I'm comfortable . . . got a house, food in my refrigerator, TV, everything, so I'm good.

> Keep out of harm's way cause this place is a stability place we maintain our food, we got connection to a medical clinic, you know what I'm saying, we got people talking to us about addiction, about HIV, and we're getting everything right here—our support system as far as here, you know what I'm saying. We're not out in the street, you know what I'm saying, this is everything. You can get no better than this here. If a person's struggling with addiction and he's HIV positive—we learn about disease and get medication—aw, man—whew—everything's right here. Everything, man.

One of the most unexpected types of positive feelings expressed was related to feeling glad about helping others. The program has no expectations that residents help with the maintenance of the building or each other, yet participants voluntarily noted that this experience was new to them since moving into the building. Several of the interviewees indicated their interest in being a peer advocate, some noting that they were inspired by the peer-staffing model used by the housing program. Others talked about helping others in less formal, but no less meaningful ways.

> Ah . . . I'm going to be an advocate! I'm going to be an advocate because I am very resourceful. I want to set that as a goal for myself. I don't know 'bout the schooling and what to do with that, but maybe if there's a way to get around that without like doing the schooling or maybe I could, I'm not dumb or nothing or anything, I just can't focus and concentrate. But I want other people, but I would love to help other people to stop and not make the mistakes that I made, ya know. Before they make them, let them know what I went through so they don't have to go through all that bullshit of the drugs and the way I got HIV. I want to be able to reach out and help somebody.

> In 3 years I will be in an office talking to somebody about all this. That would be absolutely, positively phenomenal. I think I would be an asset to the community, especially the African American gay community. More than anything I am striving for that. And I will if the God I serve is willing to help me along through this . . . along with staying clean and sober.

> Me and G—got books the other day, and yesterday I went to the hospital with her . . . things I wouldn't do, I do now. Ya know, like just like sitting there at the hospital 4 or 5 hours just with her . . . . I wouldn't do that back in the day. And I know she would do that for me . . . that's good.

It is important to note that positive feelings were reported by current residents as well as former residents, including those who had left the program

in negative contexts. Coders reviewed the transcripts blinded, meaning that they did not know if a participant was currently housed, had left for independent housing, or had left in a negative context. Interestingly, the individuals who left in negative contexts shared more positive feelings than other study participants, including comments about the sense of community they experienced and feedback about life lessons learned as a result of being in the program. All of the former residents who had left the program in unhappy circumstances revealed that they missed former residents or staff.

Mechanisms of Success

The second major theme that emerged from the qualitative interviews reflected program elements identified by residents as being helpful to them in improving their stability and clinical adherence. Subthemes include an increased sense of community, supportive assistance, and the representative payee program.

Sense of community

Residents expressed the feeling that living in a program with other people in similar circumstances was very important to them. Having peers as staff providers also helped to build a sense of community and trust. In some cases, participants noted specifically that this shared experience reduced their feelings of being stigmatized. They also talked about how much they valued having peer connections, referring both to connections with other residents and to the peer staff members. Many stated explicitly that they valued the fact that these peers were not judgmental.

> The community. You know, it's a community and I'm . . . it's just . . . when you're feeling bad you can always come and talk to somebody and I mean no matter what you do they're going to say the best thing, you know, for you, but . . . it's up to you to determine whether its good or bad, you're your own judge.

> The one thing I really like here is that were really like a big family, for real. We argue and fight and argue and fight, but there ain't no outsider comin' in—we're gonna stick together and that's one thing I've always liked is the unity of family. There are ones who have been here a minute . . . there's some still here; when I came back they are like Uncle So-and-so and Momma So-and-so 'cause we have that connection. That's the best thing. I like it.

> One is that everyone can relate. We all have something in common. You're comfortable to live there because you're not worried about somebody whispering something about you. You know . . . that, um . . . there's

> help there . . . there's people there . . . there's staff there that been there so they can relate. It's not like someone can just come in there that never used or don't have HIV or whatever but there's people there that can really relate and understand and help you through some things. If you want the help, which I did. I always went down there to see what was going on. Ya know, they help you get out a little bit, take you to things. They also, there's been times, where people, even I, sold food stamps or whatever and then they're knocking on your door [mimicked knocking on door and talking like staff], "Wanna come by and get something to eat?" So it was help.

Supportive assistance

References to supportive assistance included clinical support, practical support, and emotional support. Although the program does not provide medical care or employ medical staff members, study participants indicated that the support of program staff was integral to helping them become more adherent to medication and medical appointments.

> If it wasn't for this program, I um, there is no telling where I would have been. You know? And they made sure I adhered to the script. Cause I was taking my medicine and throwing it up in the closet for years. And um, they helped me get through that. Sometimes I don't do it, you know, take my meds as required. But they still stick with you and make sure they push you, push you, push you. And um, that helped me.

> It's helped me greatly with maintaining any kind of medical appointments and mental health appointments and it's helped me greatly to get my uh . . . just the business end of my life in order better.

> They helped me financially, be stable. They helped me to learn to manage what little money that I do have left. They helped me to become a better person. They helped me to be more self-sufficient. They helped me with housing assistance. They helped me with support services, when I need somebody to talk to. I can always come here and sit down at the office. Not one of these social workers [at other providers] would. Here I can go to any one of them and sit there and talk to them and get some good feedback from them. They helped me with medication if needed. They give me referrals like I'm trying to do this housing thing and they do this for me, too.

> Well one thing is I can never see myself on the street again. And that's not an option. I'm still struggling in a lot of areas but right now I got both feet on the ground. I thank the people in the 8 years that I been dealing with for their support. Everything doesn't always go the way you want it to go sometimes but when you have people that have your back I think it makes a difference.

Overall, participants viewed living at The Open Door as being a part of a supportive community that was inclusive of residents and staff. The sense of community they experienced provided relief from the stigma that often accompanies drug use, HIV/AIDS, and homelessness. This relief, in turn, might be an important factor in supporting clinical adherence.

Representative payee

One of the most unexpected findings was that study participants reported that the representative payee system was an important part of becoming stable and clinically adherent. A representative payee is a person or organization that is appointed to receive Supplemental Security Income or Social Security Disability Insurance checks on behalf of the beneficiary and then ensures that necessary bills are paid. Although this service typically incurs a fee, The Open Door provides the service free of charge and helps residents to develop a monthly budget. Participants overwhelmingly indicated that the representative payee system was valuable to them.

> One of the main things I like is the payment service. When I first started, I didn't like it—I admit I had a tantrum and I screamed and slammed doors, but then I realized it was to my advantage.

> I was just talking to a friend of mine the other day about how I would be already dead if I had all that money, so that's a good thing.

> Since I had started losing control of maintaining payment of my own rent, it was kind of a blessing that you all started doing it the way you all did it to maintain that everybody had a roof over their head by taking the rent money out and stuff, it's a blessing for that.

> The most important thing that is happened since I been in this program is that I never maintained a place where I had to pay rent. This is the first time in 3 years that I had to pay rent. I have a payee to make sure I pay rent but I feel proud that I still got an apartment after 3 years and I've got a roof over my head and I'm not out in the street and I'm not in and out of jail. The stability that The Open Door has gave me is the most important thing that I'm proud of being here for them accepting me, because it's stabilized everything for me.

Although seemingly counterintuitive, it is important to note that although many residents were initially resistant to the idea of a representative payee, most of them actually credited this service with their ability to achieve financial independence. Even more interesting is the fact that even after leaving the program, the participants in this study and the majority of the residents of the program continue to use The Open Door as

their representative payee. The decision to do so is entirely voluntary, and most revealingly, includes individuals who left the program under negative circumstances.

DISCUSSION

The goal of this qualitative study was to explore which elements of a transitional housing program might be considered by residents and former residents to be facilitators of success, defined as improved clinical adherence as measured by viral suppression. Two overarching themes emerged: positive changes, which captured personal processes or characteristics that residents reported as having changed as a result of living in the program; and mechanisms of success, which reflected aspects of the program to which residents attributed their improved adherence. Positive changes included changes in drug use patterns, increased independence, and positive feelings. Mechanisms of success included an improved sense of community, supportive assistance, and representative payee services.

This study provides interesting findings related to HIV adherence and the importance of this intervention approach. Individuals living with HIV/AIDS who have undetectable viral loads have the same mortality rates as the general population (Rodger et al., 2013), and having a suppressed viral load also reduces the chance of transmitting the virus by as much as 90% (Loutfy et al., 2013). With these data in mind, it is critical to pinpoint effective means of increasing clinical adherence across all subpopulations of people living with HIV/AIDS. Findings from these qualitative interviews suggest some promising mechanisms for improving adherence success among a group of chronically homeless substance users with mental health diagnoses, including peer support and supportive services for managing finances. This study augments the findings of previous research documenting high rates of clinical adherence for residents of this housing program. It also identifies some of the specific components of harm reduction that are considered most useful to residents' success, including peer and community support, the ability to continue substance use in a nonjudgmental environment, and the use of a representative payee to assist with management of finances.

The fact that participants noted the importance of living in a community of peers and being served by peer providers is consistent with other research findings (Bean, Shafer, & Glennon, 2013; Davidson, Bellamy, Guy, & Miller, 2012; Frye, 2004; Hystad & Carpiano, 2012). Peer support in group settings or via individual providers is increasingly documented as an important resource for marginalized individuals. Although additional research is needed to assess the degree and quality of exposure to peer interventionists needed to improve adherence rates for marginalized populations, our research supports the findings that peer support is a critical component of the

Housing First harm reduction model (Bean et al., 2013). Peers can be important for role modeling, problem solving, and validating one's experiences. There is evidence that, for individuals who are addicted or who have severe mental illness, peers can improve engagement in treatment, increase self-care, and even decrease levels of depression and psychosis (Davidson et al., 2012). Further, the feeling of belonging to a community has been positively correlated with improving health behaviors (Hystad & Carpiano, 2012). The findings of this study are also consistent with research on therapeutic communities, which has demonstrated that joining a supportive community might help relieve distress and improve social functioning (Frye, 2004). An important finding was that residents who had left the program in negative contexts were as likely or more likely to report positive responses as those who still resided there or who had left for independent housing.

Consistent with the authors' previously published research on this program (Hawk & Davis, 2012), participants of this study reported decreases in substance use after being a part of The Open Door. The qualitative results discussed here demonstrate an interesting cognitive shift regarding residents' substance use. Participants indicated an important change in the way they thought about their drug and alcohol use, reporting a perception of increased control and independence over their substance use as well as less shame about it, regardless of whether they had a reduction in use or not. These changes are highly consistent with harm reduction principles and suggest the need for broader dissemination of harm reduction models of care.

The fact that so many study participants identified representative payee services as important to their success is intriguing and requires further investigation. There is limited research available on this topic in the context of HIV clinical adherence. Existing research suggests that representative payee services help severely mentally ill clients maintain basic services including housing (Hanrahan et al., 2002), and there is some evidence that substance users might be more likely to access psychiatric support services when linked with a representative payee (Rosen, McMahon, & Rosenheck, 2007). However, some studies have documented a perception of coercion that can be associated with representative payee assignment among the nonadherent severely mentally ill (Elbogen, Soriano, Van Dorn, Swartz, & Swanson, 2005) and that this role can potentially interrupt the client–provider relationship (Angell, Martinez, Mahoney, & Corrigan, 2007). Clearly, additional research must be conducted to understand why study participants reacted so favorably to this program's representative payee services.

Study Limitations

This study has a number of limitations. Because all of the study participants were residents of one housing program, results might be difficult to generalize to other housing programs or locations. Also, because the study used

qualitative methods, viral suppression cannot be unequivocally linked with specific program elements without the use of larger samples and quantitative methods. Further, the mean age of study participants was 49.5, which is consistent with the population of residents served in this Housing First program. It is possible that the age of the participants increased their abilities to be self-reflective. Additional research is needed to understand how this approach would be experienced by younger individuals. Regardless, this approach could have important implications for intervention given that the number of adults aged 50 or older who use illicit drugs is projected to double from 2.8 million in 2006 to 5.7 million by the year 2020 (Gfroerer, Penne, Pemberton, & Folsom, 2003; Han, Gfroerer, & Colliver, 2010), and that these individuals are at significantly greater risk of having or acquiring HIV than those who do not use drugs. In fact, it is estimated that half of all individuals with HIV/AIDS will be 50 years of age or older by 2014 (Luther & Wilkin, 2007). A greater focus on exploring how harm reduction and Housing First interventions impact older adults living with HIV/AIDS is certainly warranted.

Another limitation is the possibility of research bias because the interviewers were known at least marginally to the residents. However, it is also possible that the trust and rapport that was already established allowed interviewees to give honest answers, controlling for the potential of social desirability bias. This seems to be the more likely scenario given the program's low threshold approach. At the time of the interviews, residents had already experienced acceptance by program staff, even though they had exhibited behaviors that are traditionally "unacceptable" in intervention environments. This experience of trust and acceptance most likely carried over to our in-depth qualitative interviews.

CONCLUSION

This is one of the first studies to address mechanisms of harm reduction in a Housing First program, rather than just identifying theoretical approaches or philosophical concepts related to harm reduction. It is important that these mechanisms were explored phenomenologically; that is, from the perspective of the residents who participated in the study.

The results of this study suggest multiple avenues for future research. Community engagement, supportive assistance, and representative payee services could be important underutilized mechanisms for helping chronically homeless substance users living with HIV to improve clinical adherence. In relation to the adoption of a harm reduction framework within supportive housing, exploring individuals' changing drug use patterns is also an important research agenda. Understanding the context in which residents continue to use illicit drugs but increase their sense of control over their

drug use might yield important information about how to implement similar harm reduction housing programs or otherwise intervene with people who are substance users. At the time of this study, The Open Door operated on a budget of less than $40,000 per year. This housing approach could be a cost-effective and replicable method of improving medication adherence among homeless people living with HIV, which might in turn reduce HIV health disparities and rates of secondary transmission.

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